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General Correspondence Incoming
cc: Dana
Joe
Ingrid K



United States Department of the Interior
FISH AND WILDLIFE SERVICE

UTAH FIELD OFFICE
2369 WEST ORTON CIRCLE, SUITE 50
WEST VALLEY CITY, UTAH 84119

In Reply Refer To

FWS/R6

ES/UT

10-TA-0005

January 22, 2010

Daron Haddock
Permit Supervisor; Coal Program
Utah Department of Natural Resources
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801

RE: Satisfying the 1996 Biological Opinion on Surface Coal Mining and Reclamation Operations for Impacts to Federally Listed Colorado River Fish Species in the Green and Colorado River Basins, Utah

Dear Mr. Haddock:

The purpose of this letter is to establish species-specific standards and procedures to protect federally listed Colorado River fish species from impacts related to coal mining operations in the upper Colorado River basin of Utah. The species-specific standards and procedures described in this letter are designed to fulfill the requirements under the 1996 Biological Opinion on Surface Coal Mining and Reclamation Operations (1996 BO), satisfying the responsibilities of the Utah Division of Oil, Gas, and Mining (UDOGM) and the US Fish and Wildlife Service (Service). The standards and procedures will provide minimum permitting and performance standards for protection and enhancement of the federally endangered Colorado pikeminnow (*Ptychocheilus lucius*), humpback chub (*Gila cypha*), bonytail (*Gila elegans*), and razorback sucker (*Xyrauchen texanus*) and their designated critical habitat (Colorado River fish species) when coal operations occur in the Green and Colorado River basins and are greater than 10 miles from designated critical habitat. This letter does not discuss standards and procedures for any other species, nor does it discuss standards and procedures for coal operations less than 10 miles from designated critical habitat. Projects that are within 10 miles of critical habitat may have additional impacts that would not be covered under the 1996 BO.

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DIV. OF OIL, GAS & MINING

The 1996 Biological Opinion

On March 21, 1995, the Office of Surface Mining (OSM) requested formal consultation regarding the continuation and approval of surface coal mining and reclamation operations under State and Federal regulatory programs. A Biological Opinion and Conference Report were completed by the Service on September 24, 1996. The 1996 BO established guidance for complying with both the Surface Mining Control and Reclamation Act of 1977 (SMCRA) and the Endangered Species Act of 1973 (ESA). The Service concluded that the implementation of surface mining activities consistent with regulations (30 CFR Part 700 to end) is not likely to jeopardize the continued existence of any threatened, endangered, or proposed species or result in adverse modification of designated or proposed critical habitats. This conclusion was predicated on implementation of the requirements described in the document and the terms and conditions set forth in the incidental take statement. Fulfilling the responsibilities outlined in the 1996 BO achieves ESA compliance for all federally-related activities by the Regulatory Authority, be it the State or OSM.

The following is a summary of the requirements of the 1996 Biological Opinion on Surface Coal Mining and Reclamation Operations:

A. General Requirements

1. The review and issuance of permits must include the consideration of listed resources.

B. Pre-Application

1. The Service Field offices will distribute and update a list of species and critical habitat and specific protection measures needed for these species and critical habitat to OSM and the Regulatory Authority.
2. The Regulatory Authority will determine whether a listed species or critical habitat is present in a proposed permit area or adjacent area based on the list provided by the Service.
3. When listed species or critical habitat are present in the permit area or adjacent area, the Regulatory Authority will coordinate with the Service and State Wildlife Agency to determine the scope and level of detail of resource information contained in a permit application.
4. The Regulatory Authority will provide to the applicant an explanation of the scope and level of detail necessary to complete the resource information in the permit application.

C. Permit application package

1. The Applicant shall include the following resource information in permit applications for listed or proposed species or their critical habitat:
 - a. Site-specific resource information.
 - b. A protection and enhancement plan that describes how the operator will minimize disturbances and adverse impacts:
 - i. Protective measures during the active mining phases of the operation.

- ii. Enhancement measures during the reclamation and post-mining phase of the operation.
2. The Service will review the resource information in the permit application. The Service requests the information from the Regulatory Authority which is to be provided within 10 days of the request.
3. OSM, State Regulatory Authorities, and the Service must develop additional species-specific or site-specific standards and procedures to protect listed resources.
4. The Regulatory Authority will quantify take of listed species resulting from mining operations. Quantification of take occurs on a permit-by-permit basis.
5. The Service will develop, in close coordination with OSM and the State regulatory Authority, any necessary site-specific measures to minimize potential take. The measures must be enforceable under the mining permit.
6. The Regulatory Authority will provide to the Service a written explanation whenever the authority decides not to implement species-specific measures recommended by the Service. The Service provides a concurrence letter to the Regulatory Authority if the Service concurs with the Regulatory Authority's action. If the Service does not concur with the Regulatory Agency's action an, elevation process will be used to reach agreement on the implementation of the species-specific measures.

D. Notification of Receipt of Complete Permit Application and Subsequent Permitting Actions

1. The Regulatory Authority will notify the Service of completed application, a significant revision to a permit, or a renewal of a permit.

E. Written Findings

1. As a precondition for approval of a permit application, the Regulatory authority will find, in writing, that the mining operation will not jeopardize listed species or result in adverse modification of critical habitat, based on the information in the mining application.
2. The Regulatory Authority will make a written finding that the exploration and reclamation activities will not jeopardize the continued existence of an endangered species or threatened species or result in destruction or adverse modification of critical habitat of those species.

F. Notification of Decision

1. The Regulatory Authority will notify the Service, in writing, concerning decision made on permit issued that the Service has offered comments.

G. Performance Standards

1. The Operator determines whether a listed species is present in the permit area or adjacent area during the pre-application phase of the operation or, if new information is presented at any time during the mining operation.
2. The Regulatory Authority consults with the State and the Service when the Operator determines that a listed species occurs in the permit area. The Regulatory Authority, in consultation with the Service, must identify whether, and under what conditions, the operator may proceed with the operation if listed species occur in the permit area.

3. The Operator shall use the best available technology to minimize disturbance of and adverse impacts to fish, wildlife, and related environmental values and shall achieve enhancement of these same resources where practicable.
4. The Operator will not jeopardize listed species or adversely modify critical habitat during mining operations.
5. The Regulatory Authority must notify the Service within one working day if a dead or impaired individual of a listed species is found in the permit area or in adjacent areas.
6. OSM and the Regulatory Authority must regulate the mining activity covered by the incidental take statement in the 1996 BO and in site-specific incidental take statements. The protective coverage for the operator against the unlawful take of listed species may lapse if the regulatory authority fails to require permittees to adhere to, or if OSM fails to monitor compliance with, the terms and conditions of the incidental take statement.
7. The Regulatory Authority must implement any species-specific protective measures to minimize anticipated incidental take. The Regulatory Authority must also require compliance by the operator with the species-specific protective measures.

H. Coal Exploration

1. The Applicant will include a description of any listed species within proposed exploration areas in exploration permits.
2. The Regulatory Authority shall only approve coal exploration permits if the Applicant has demonstrated that the action will not jeopardize listed species or adversely modify critical habitat.
3. The Operator will not disturb critical habitat during coal exploration as part of the performance standards.

I. Midterm Permit Review and Permit Renewal

1. The Regulatory Authority must require a reasonable revision of a permit at any time if the operation is not in compliance with the species protection provisions of the approved regulatory program.

J. Conservation Recommendations

1. The Service will recommend discretionary conservation recommendations to OSM in order to minimize or avoid adverse effects of the mining operation to listed species.

K. Reinitiation of Consultation

1. Reinitiation of consultation may be requested by OSM or the Service if
 - a. new information indicates that the approval or conducting of mining operation and reclamation is affecting listed species or modifying critical habitat in a manner or extent not considered in the 1996 BO or
 - b. the approval or conducting of mining operation and reclamation is modified in a manner not considered in the 1996 BO that causes an adverse effect to listed species or critical habitat.

L. Cumulative Effects

1. The Applicant, in cooperation with the regulatory authority, must analyze cumulative impacts of mining operations at the site-specific level if listed resources are present in the action area.

In fulfillment of A.1, this letters communicates the processes that must occur to meet the above requirements for federally listed Colorado River fish species in Utah.

Endangered Colorado River Fishes

The Colorado pikeminnow, razorback sucker, humpback chub and bonytail are endangered fish species that once thrived in the Colorado River system. These fish species are now endangered in part because of human impacts on their habitat over the past 100 years. The two types of habitat alterations that appear to have had the greatest impact on the endangered fish species have been water development and introduction of non-native fishes. Specifically, hundreds of dams, diversions and other barriers have been constructed, river flows have been cut by a third, and more than 40 species of non-native fish have been introduced in the upper Colorado River basin.

Critical habitat for these species was established on March 21, 1994 (59 FR 13374). In Utah, designated critical habitat includes portions of the San Juan, Green, Colorado, White and Duchesne Rivers and their 100-year floodplains (Appendix A). All four of the listed Colorado River fish require the same Primary Constituent Elements (PCEs) of critical habitat essential for their survival: water, physical habitat, and the biological environment. This includes a quantity of water of sufficient quality that is delivered to a specific location in accordance with a hydrologic regime that is required for the particular life stage for each species. The physical habitat includes areas of the Colorado River system that are inhabited or potentially habitable for use in spawning and feeding, as a nursery, or serve as corridors between these areas. In addition, oxbows, backwaters, and other areas in the 100-year floodplain, when inundated, provide access to spawning, nursery, feeding, and rearing habitats. Food supply, predation, and competition are important elements of the biological environment.

Upper Colorado River Endangered Fish Recovery Program

Because water depletions from the upper Colorado River basin are a major factor in the decline of the endangered fishes, the Service initially determined that any depletion will jeopardize their continued existence and will likely contribute to the destruction or adverse modification of their critical habitat (US Fish and Wildlife Service, Region 6 Memorandum, dated July 8, 1997). To address depletion issues, the Department of the Interior, the states of Wyoming, Colorado and Utah, and the Western Area Power Administration established the Recovery Implementation Program for Endangered Fish Species in 1988.

Called the Upper Colorado River Endangered Fish Recovery Program (Recovery Program), this effort involves federal, state and private organizations and agencies in Colorado, Utah, and Wyoming. The program complies with all applicable laws, including the federal Endangered

Species Act, state water laws, river laws, and interstate water compacts. Recovery strategies include conducting research, improving river habitat, providing adequate stream flows, managing non-native fish, and raising endangered fish in hatcheries for stocking.

In order to further define and clarify the process in the Recovery Program, a section 7 agreement (Agreement) was implemented by the Recovery Program participants on October 15, 1993. The agreement stipulated that the Recovery Program acts as the reasonable and prudent alternative (RPA) for depletion impacts in the Upper Colorado River Basin, in order to avoid jeopardy to the endangered fishes. Incorporated into this agreement is a Recovery Implementation Program Recovery Action Plan which identifies actions required to recover the endangered fishes in the most expeditious manner.

After many years of successful implementation of the Recovery Program and Agreement, federal action agencies have come to anticipate Recovery Program activities and a requirement of a financial contribution (also known as a depletion fee) toward these activities serving as the RPA that must be included in their project planning to avoid jeopardy to listed species. Thus, the RPA has essentially become part of the proposed action. Consequently, the Recovery Program activities now serve as conservation measures within the proposed action and minimize adverse effects to listed species or critical habitat. Because of this conservation measure, the Service can now make the determination that water depletions in the Colorado River basin may affect and are likely to adversely affect the Colorado River fish species, which is a non-jeopardy determination.

As mentioned above, included in the Recovery Program was the requirement that a one-time depletion fee would be paid to help support the Recovery Program. This figure was set at \$10.00 per acre-foot (AF) based on the average annual depletion of the project and is adjusted annually for inflation (the FY2010 figure is \$18.99 per AF). However, on July 8, 1997, the Service issued an intra-Service biological opinion determining that the depletion fee for average annual depletions of 100 AF or less are no longer required because the Recovery Program has made sufficient progress and now is the reasonable and prudent alternative to avoid the likelihood of jeopardy to the endangered fishes and to avoid destruction or adverse modification of their critical habitat. It is important to note that these provisions of the Recovery Program were based on appropriate legal protection of the instream flow needs of the endangered Colorado River fishes.

Satisfying the 1996 BO for Federally Listed Colorado River Fishes in Utah

Using the requirements summary above, the following standards and procedures will satisfy the 1996 BO for federally listed Colorado River fishes in Utah.

A. General Requirements

The Service and UDOGM have cooperatively discussed instituting a clear, standardized system for considering impacts to the federally listed Colorado River fish species from coal-mining operations, satisfying requirement A.1. This letter describes the outcomes of these discussions and the specific steps each agency must take to meet the above requirements.

B. Pre-Application

Satisfying requirement B.1, the Service maintains a list of endangered, threatened, proposed, and candidate species that occur in each Utah county. This list can be accessed on the internet at <http://www.fws.gov/mountain-prairie/endspp/countylists/utah.pdf>. For Colorado River fish species, UDOGM must determine in what river basin coal-mining operations occur. If operations occur in any part of the Green or upper Colorado River basins (Appendix A), UDOGM shall then determine that operations could have impacts to Colorado River fish species (B.2). UDOGM shall then follow the guidance in this letter to determine the scope and level of resource information contained in a permit application (B.3) and will provide an explanation of this to the applicant (B.4).

C. Permit Application Package

The Service and UDOGM have agreed on site-specific standards and procedures to protect the Colorado River fish species (C.3). The vast majority of coal mining occurs in headwater areas, far from designated critical habitat. Impacts to the fish species from these operations are limited to water depletions and possible water discharges. Standards and procedures that relate to water depletions are in accord with the Recovery Program and are consistent with Service consultation processes for other industries (agriculture, oil and gas developments, etc.). Standards and procedures that relate to possible water discharges are consistent with state water quality requirements. However, in the event that a coal mining operation occurs within 10 miles of designated critical habitat, which includes the 100-year floodplain, the simplified process described below does not apply and individual project consultation must occur.

For operations occurring within the Green or Colorado River basins, the Service requires that specific resource information be provided in the permit-application package. Site specific resource information (C.1.a) must include a complete description of:

- The project's water right, including source (if leased from another water right holder), duration of use, and amount (calculated for annual use in acre-feet);
- Any planned changes to the hydrologic condition of the site outside of the water right consumption, such as planned water discharges (amount and duration), known aquifer encounters, de-waterings of streams and changes in channel course; and
- The project location, which should include:
 - A site map with project boundaries and areas of disturbance clearly marked;
 - USGS 8-digit Hydrologic Unit Code (HUC) of all watersheds in which the project will occur¹; and
 - Distance (in river-miles) from project location to nearest designated critical habitat reach.

¹ A description of the HUC system can be found at <http://water.usgs.gov/GIS/huc.html> and a list of HUCs for the state of Utah can be found at http://water.usgs.gov/GIS/huc_name.html

A protection and enhancement plan describing the minimization of disturbances and adverse impact must be filed with the permit application package (C.1.b). Information that must be included in the plan's description (C.1.b.i) includes:

- Protective measures describing the water quality of all water (planned or potential) that is released during the operation of the mine.
 - For example, a description of state water quality requirements for released water will allow the Service to determine if water quality is ecologically suitable for aquatic species;
- Enhancement measures describing the reclamation of mining sites and mine closure.
 - Disturbed areas (work site(s), stockpile site(s), pit) should be revegetated when appropriate after operations with native plants or certified weed-free native seed. The planting should be monitored for success. If the planting fails it should be reseeded/planted;
- Protective measures describing response to accidental pollution spills; and
- Enhancement measures describing how local water quality will be maintained after mine closure, including the prevention of mine drainage.

Conservation measures (C.3) implemented to offset water depletions in the upper Colorado River basin will follow the Upper Colorado Basin Endangered Fish Recovery Program, under the following procedure:

- I. The Service and UDOGM will assume that the coal mining operations will fully use their allotted annual water right. They will calculate the project's annual depletion as that amount for Section 7 of the Endangered Species Act purposes and in order to calculate the depletion fee.
 - a. Although a coal operation may use less water than this amount, it is very difficult to calculate a coal operation's annual water usage in advance because coal operations may change as conditions warrant. Because Section 7 consultation must occur before a project may begin and because a depletion increase of 10% will re-initiate consultation, it is likely that a project may require multiple consultations. Consulting on the maximum possible annual depletion allowed under the applicant's water right will serve to reduce the number of consultations, cover all projects activities, and simplify the process.
- II. If the operations will occur in the Green or upper Colorado River Basins, the coal operator will submit the one-time depletion fee before operations may begin. The depletion fee only serves as a conservation measure for the project's depletion. Additional conservation measures (C.3) must be enacted if further project related impacts are present. Payment must be made to the National Fish and Wildlife Foundation and mailed to:

National Fish and Wildlife Foundation
1133 15th Street, NW
Suite 1100
Washington, DC 20005

- a. Annual water depletions under 100 AF do not require a depletion payment, as described above.
- b. Annual water depletions above 100 AF and less than 4500 AF will be charged the fiscal year rate (adjusted annually). For FY 2010 the rate is \$18.99 per AF. UDOGM will check with the Service in August of each year for the new fiscal year rate.
- c. Annual depletions above 4500 AF will require an individual project consultation, as the depletion fee does not serve as a conservation measure for such large depletions.

III. The Service will be notified of all depletions, whether they require a fee or not, in order to continue to track the total depletions occurring in Utah.

IV. The applicant may use discharged water to offset depletion amounts. In order for a discharge to have no effect on the Colorado River fish species, and therefore be allowed to offset any project depletions, the water must be of suitable quality for aquatic species. The applicant must document the following:

- a. The volume of expected mine water discharge;
- b. The stream course into which the water is released, ensuring that the water is discharged in a manner that contributes to upper Colorado River basin flows;
- c. The discharged water conforms to all applicable water right law; and
- d. The discharged water meets all state and federal water quality parameters, thus making the water suitable for aquatic species:
 - i. Water Quality of the State (Utah Administrative Code: Rule R317-2²) for each individual surface water body based on Use Designations (R317-2-6) and corresponding Numeric Criteria (R317-2-14);
 - ii. Utah Division of Water Quality Ground Water Quality Standards³; and
 - iii. Utah Pollution Discharge Elimination System (UPDES) permits.

V. UDOGM has the discretion to determine whether a proposed coal mining activity constitutes a depletion. A guide for determining depletions is provided by UDOGM's "Water Depletion For Coal Mining Operations". When these determinations are made, UDOGM will provide the Service with a brief description of the reasons behind the determination.

UDOGM shall quantify take (C.4) as the level of water reduction from the upper Colorado River basin. Estimating the number of individuals of these species that would be taken as a result of the water depletions is difficult for a number of reasons, therefore it is standard Service practice to quantify take as a measure of the water depletion.

² Available at <http://www.rules.utah.gov/publicat/code/r317/r317-002.htm#T16>

³ Available at <http://www.waterquality.utah.gov/GroundWater/gwstandards.htm>

D. Notifications and Subsequent Permitting Actions

UDOGM will notify the Service of a complete application, a significant revision to a permit, or a renewal of a permit.

E. Written Findings

For proposed permit applications, UDOGM will submit a written finding stating that the proposed mining operations, exploration and reclamation will not jeopardize the continued existence of listed species or adversely modify critical habitat.

F. Notification of Decision

UDOGM will notify the Service concerning any decisions made concerning permits on which the Service has commented. UDOGM will also notify the Service of any significant pollution spills that occur, so that the Service can assess the impacts of the spill. The Service will provide UDOGM a written letter either concurring with UDOGM's written findings or providing additional conservation methods within 30 days of receipt of UDOGM's letter.

G. Performance Standards.

For coal operations that occur greater than 10 miles from designated critical habitat for Colorado River Fish Species, following the depletion and discharge guidelines outlined in this document will satisfy the requirement of G.4, in which the operator must not jeopardize listed species or adversely affect critical habitat.

H. Coal Exploration

The Applicant will include a description of any listed species within proposed exploration areas in exploration permits. UDOGM shall only approve coal exploration permits if the Applicant has demonstrated that the action will not jeopardize listed species or adversely modify critical habitat. The Operator will not disturb critical habitat during coal exploration as part of the performance standards.

I. Midterm Permit Review and Permit Renewal

UDOGM must require a reasonable revision of a permit at any time if the operation is not in compliance with the species protection provisions of the approved regulatory program.

J. Conservation Recommendations

The Service has no specific discretionary conservation measures that apply to all projects that have not already been discussed in this document.

K. Reinitiation of Consultation

Consultation will be reinitiated under guidelines K.1.a & b (found above) and under 50 CFR 402.16, which states:

“Reinitiation of formal consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and:

- a) If the amount or extent of taking specified in the incidental take statement is exceeded;
- b) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
- c) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or
- d) If a new species is listed or critical habitat designated that may be affected by the identified action.”

Under reinitiation criteria b, if a permitted coal operation plans to increase the water depletion by more than 10% of that already approved in the Mining and Reclamation Plan, then reinitiation must occur unless a mine water discharge offset can be demonstrated. (C-IV, page 10)

Cumulative Effects

The Applicant, in cooperation with UDOGM, must analyze cumulative impacts of mining operations at the site-specific level if listed resources are present in the permit or adjacent area.

Other Requirements

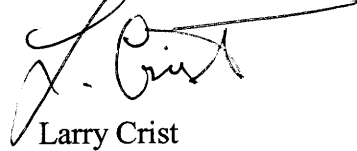
Some projects may not be covered under this guidance document and will require separate consultation. This includes, but is not limited to coal operations that may jeopardize the species through impacts not covered in this document and that occur within 10 miles of designated habitat.

Conclusion

This completes the Service’s communication of standards and procedures required to satisfy the 1996 BO for Colorado River Fishes. We appreciate UDOGM’s commitment in the conservation

of endangered species. If you require further assistance or have any questions, please contact Kevin McAbee, at (801) 975-3330 extension 143.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Crist", with a long horizontal flourish extending to the right.

Larry Crist
Utah Field Supervisor

Appendix A

Designated Critical Habitat in Utah for Federally Listed Colorado River Fish

